EFERENCE 1

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TI T-lymphocyte gene CD28 expression inhibition by oligonucleotides containing guanine quartet and treatment of immune system-mediated diseases
IN Tam, Robert C.
PA Icn Pharmaceuticals, Inc., USA
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	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5932556	A	19990803	US 1995-529878	19950917
	CA 2211621	AA	19960815	CA 1996-2211621	19960205
	AU 9652958	A1	19960827	AU 1996-52958	19960205
	AU 703139	B2	19990318		
	CN 1181021	A	19980506	CN 1996-193197	19960205
PRAI	US 1995-387041	19950209			
	US 1995-529878	19950917			
	WO 1996-US1507	19960205			

AB Oligomers are provided which are capable of reducing CD28 gene in a T cell. In addn. to specific sequences, the invention includes a class of oligomers having at least two sequences of GGGG sepd. by 3 to 5 bases. Targets include CD28 gene, 5' untranslated regions and initiation codon, and their resp. transcripts. Methods include use of the oligomers to moderate the pathogenic effects on the immune system in immune system-mediated diseases including graft vs. host disease, septic shock syndrome, viral diseases, psoriasis, Type I (insulin-dependent) diabetes mellitus, thyroiditis, sarcoidosis, multiple sclerosis, autoimmune uveitis, rheumatoid arthritis, systemic lupus erythematosus and inflammatory bowel disease.
ST guanine quartet oligonucleotide inhibition gene CD28; antigen CD28 gene expression inhibition oligonucleotide; immune disease CD28 expression inhibition oligonucleotide
IT Immunosuppressants
Transcription, genetic
(T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)
IT Immunity
(disease; T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)
IT Genetic vectors
(expression; T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)
IT Gene, animal
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(CD28, T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated

diseases)

IT Antigens
RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(CD28, T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)

IT Lymphocyte
(T-cell, T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)

IT Nucleotides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(oligo-, deoxyribo-, GGGG-contg.; T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)

IT Nucleotides
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(oligo-, deoxyribo-, thiophosphate-linked, GGGG-contg.; T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)

IT 73-40-5DP, Guanine, quartet
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)

IT 181722-90-7P 181722-91-8P 181722-92-9P 181722-93-0P 181722-94-1DP, oligonucleotide derivs. 181722-95-2P 181722-96-3P
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(gene CD28 expression-inhibiting; T-lymphocyte gene CD28 expression inhibition by oligonucleotides contg. guanine quartet and treatment of immune system-mediated diseases)